SLHS 597
Introduction to Research Methods in Speech and Hearing Sciences
Mondays, 6:00 – 7:00 PM SLHS 205

Description of Course
This course is concerned with research methods used in speech, language, and hearing sciences. The major goal of this course is to prepare students to be critical consumers of the research literature and become familiar with evidence-based practice in communication sciences and disorders. The course will focus on the types of research, research designs, and research methods that are commonly used to investigate normal and disordered human communication. Emphasis will be placed on the problems involved in asking answerable research questions and the selection of appropriate research designs.

Instructor and Contact Information
Instructor  David S. Velenovsky, Ph.D., CCC-A
E-mail  dsv@email.arizona.edu
Phone  (520) 626-9507
Office  SLHS 524
Office hours  By appointment (if door is open, feel free to knock)

Course Format and Teaching Methods
The course format is the typical lecture format. Students are encouraged to participate in class discussions. Students are expected to complete all assigned readings before the class meeting to facilitate discussion. As I’ve said before, it’s boring if I’m the only one talking!

Course Objectives and Expected Learning Outcomes
At the end of the course it is anticipated that students will be able to:
1. Demonstrate basic knowledge of research methods used in the discipline.
2. Critically evaluate published research in the discipline.
3. Describe the importance of critical thinking and writing in the discipline.
4. Demonstrate knowledge of the importance of translational research.
5. Describe the principles underlying evidence-based practice in the professions.

Absence and Class Participation Policy
This is a graduate course, you are expected to attend class sessions. Absences may affect a student’s final course grade. If you anticipate being absent, are unexpectedly absent, or are unable to participate in class online activities, please contact me as soon as possible. To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or drc-info@email.arizona.edu. If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057. If you are unable to attend class, then you must notify the instructor. If you miss class material, then it is your responsibility to obtain the information from your classmates. Students who miss class due to illness or emergency are required to bring documentation from their health-care provider or other relevant, professional third parties. Failure to submit third-party documentation will
result in unexcused absences.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops is available at: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, http://policy.arizona.edu/human-resources/religious-accommodation-policy

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: https://deanofstudents.arizona.edu/absences .

Course Communications

Notifications regarding course policies, schedule changes or assignments will be made through email and/or notification on the course D2L website.

Required Texts or Readings


Additional Readings: Will be posted in D2L

Assignments and Examinations: Schedule/Due Dates shown on course schedule @ end of syllabus

The total number of points that can be earned in this course is 50. Students will turn in a paper at the end of the semester. See below for due dates. THERE IS NO FINAL EXAM FOR THIS COURSE!

Written Assignment

All written assignments must follow the guidelines of the publication manual of the American Psychological Association (APA), which may be found at http://www.apa.org/pubs/books/4200066.aspx . If you need extra help communicating your thoughts in the written form (i.e., writing a paper), you may wish to consult the Writing Center on campus. The Writing Center is a free resource for the UA community. At the Writing Center, a trained peer consultant will work individually with you on anything you are writing at any point in the writing process. For more information or to make an appointment, visit their website at http://thinktank.arizona.edu/tutoring/writing , or stop by any of their three locations on campus (see link for locations and hours), or call (520) 626-0530. The assignment is listed below:

Modeled from:

Graduate and Professional Student Council Research and Project Grants Program

Applicants to the GPSC Research and Projects Grant program will be asked to submit a jargon-free proposal narrative of no more than 3 pages (12-point Times New Roman font, single-spaced, 1-inch margins on all sides) which should include:

1. An introduction to the project, including relevant background and the major research question/goal(s).

2. A description of the methods, tests, experiments, or data collection procedures to be followed, including a description of the timeline for project completion.

rev. 11/5/18
3. The expected outcomes and impacts of the project, including:
   a. Clinical impact/value
   b. Contribution to the field of study and/or broader communities
   c. Future directions

4. A list of items requested from GPSC addressing the necessity and reasonableness of each item. (i.e., materials needed for testing beyond what you already have available in clinic. For example, audiologists do not need to request an audimeter or a sound booth, etc. But if a specific test is needed that is not in the clinic, that would be listed. If you need the Word Intelligibility by Picture Identification (WIPI) test or the Goldman-Fristoe test of Articulation 2nd edition, etc., you can ask for funding for these or similar tests. If a laptop is needed to administer a test, then that can be included. This money is also used to pay subjects, so you may wish to discuss this.

Proposals may contain figures, images, graphs, charts, etc., but applicants should note that these Do count towards the page limit.

References may be included on a separate page (limited to one page, 12-point Times New Roman font, single-spaced, 1-inch margins on all sides). Applicants should use whatever citation and reference format is appropriate for their field.

Proposals will be evaluated based on inclusion of all of the above criteria, as well as their professionalism, strength of argumentation, and clarity of writing

Grading Scale and Policies
Course grades will be awarded based on: (Points earned/50) x 100
A standard grading scale will be used:
A= 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
E = 00-59%

University policy regarding grades and grading systems is available at http://catalog.arizona.edu/policy/grades-and-grading-system

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete and http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal respectively.

Dispute of Grade Policy Students will have 7 days from the time the final grades are posted to dispute a grade.

Written Proposal Due Dates:
Subject due on February 25th
Introduction due on March 25th
THE FINAL PAPER IS DUE ON MAY 1st
## Scheduled Topics/Activities:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings/activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/14/2019</td>
<td>Introduction</td>
<td>Pre-class quiz</td>
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<tr>
<td>1/21/2019</td>
<td>Science</td>
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<tr>
<td>2/4/2019</td>
<td>Institutional Review Board</td>
<td>Guest Lecture</td>
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<tr>
<td>2/11/2019</td>
<td>Manipulation and Variables</td>
<td>Orlikoff, Schiavetti &amp; Metz Chapters 2 &amp; 3</td>
</tr>
<tr>
<td>2/18/2019</td>
<td>Review of Evidence Based Practice</td>
<td>Guest Lecture</td>
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<tr>
<td>2/25/2019</td>
<td>Junk Science</td>
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<td>3/4/2019</td>
<td>Methods</td>
<td>Orlikoff, Schiavetti &amp; Metz Chapter 6; Lin et al., (2013) Hearing Loss and Cognitive Decline in Older Adults: Read Lin et al., (2013) and be prepared to discuss the methods, including (1) who the participants are, (2) what procedures and materials are used, (3) what the dependent and independent variables are, and (4) what, if any, problems there are with the design/methods.</td>
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<tr>
<td>3/11/2019</td>
<td>Spring Break</td>
<td></td>
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<tr>
<td>3/18/2019</td>
<td>Abstract and Introduction</td>
<td></td>
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<tr>
<td>3/25/2019</td>
<td>Integrity in Science</td>
<td>Guest Lecture: Jenny Hoit</td>
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<tr>
<td>4/1/2019</td>
<td>Results and Data analysis</td>
<td>Guest Lecture, STATS!; Orlikoff, Schiavetti &amp; Metz Chapters 7 &amp; 8</td>
</tr>
<tr>
<td>4/8/2019</td>
<td>Results and Data analysis</td>
<td>Guest Lecture: STATS!</td>
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<tr>
<td>4/15/2019</td>
<td>The Discussion</td>
<td>Orlikoff, Schiavetti &amp; Metz Chapter 9</td>
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<tr>
<td>4/22/2019</td>
<td>How does this Relate to Clinic?</td>
<td>TBD</td>
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<tr>
<td>4/29/2019</td>
<td>Clinical Decision Making</td>
<td>Orlikoff, Schiavetti &amp; Metz Chapter 10</td>
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<tr>
<td>5/1/2019</td>
<td></td>
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</tbody>
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### Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).
Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

**Threatening Behavior Policy**

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See [http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students](http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students).

**Accessibility and Accommodations**

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit [http://drc.arizona.edu](http://drc.arizona.edu).

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

**Code of Academic Integrity**

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: [http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity](http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity).

The University Libraries have some excellent tips for avoiding plagiarism, available at [http://www.library.arizona.edu/help/tutorials/plagiarism/index.html](http://www.library.arizona.edu/help/tutorials/plagiarism/index.html).

*Selling class notes and/or other course materials to other students or to a third party for resale is not permitted* without the instructor’s express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

**UA Nondiscrimination and Anti-harassment Policy**

The University is committed to creating and maintaining an environment free of discrimination; see [http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy](http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy).

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

**Additional Resources for Students**

UA Academic policies and procedures are available at [http://catalog.arizona.edu/policies](http://catalog.arizona.edu/policies).

Student Assistance and Advocacy information is available at [http://deanofstudents.arizona.edu/student-assistance/students/student-assistance](http://deanofstudents.arizona.edu/student-assistance/students/student-assistance).

**Confidentiality of Student Records**
Subject to Change Statement

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

<table>
<thead>
<tr>
<th>ASHA Standard III – SPH 500</th>
<th>Standard III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner Outcomes</td>
<td>Assessment Method</td>
<td>A</td>
</tr>
<tr>
<td>Demonstrate basic knowledge of research methods used in the discipline.</td>
<td>Test, Class participation, Proposal</td>
<td>X</td>
</tr>
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<td>Describe the principles underlying evidence-based practice in the professions.</td>
<td>Test, Class participation</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate an ability to conduct a literature search and review.</td>
<td>Proposal</td>
<td>X</td>
</tr>
<tr>
<td>Develop a research proposal on a topic pertinent to the discipline or professions.</td>
<td>Proposal</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate appropriate oral presentation skills.</td>
<td>Presentation</td>
<td>X</td>
</tr>
</tbody>
</table>

**Correlates**

- Anatomical/physiological: x
- Acoustic: x
- Psychological: x
- Developmental: x
- Linguistic: x
- Cultural: x